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## NOTICE OF ALLOWANCE AND FEE(S) DUE

140

7590

11/17/2009

LADAS & PARRY LLP  
26 WEST 61ST STREET  
NEW YORK, NY 10023

EXAMINER

CRAIG, DWIN M

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 11/17/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,241	05/04/2006	Kazuaki Serizawa	U 016289-4	6708

TITLE OF INVENTION: PROCESS SIMULATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

140 7590 11/17/2009

**LADAS & PARRY LLP**  
**26 WEST 61ST STREET**  
**NEW YORK, NY 10023**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

### Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the **Mail Stop ISSUE FEE** address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,241	05/04/2006	Kazuaki Serizawa	U 016289-4	6708

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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
CRAIG, DWIN M	2123	703-006000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.	1 _____

"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

\_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted:

Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/578,241	05/04/2006	Kazuaki Serizawa	U 016289-4	6708
140	7590	11/17/2009	EXAMINER	
LADAS & PARRY LLP 26 WEST 61ST STREET NEW YORK, NY 10023		CRAIG, DWIN M		
		ART UNIT		PAPER NUMBER
		2123		
DATE MAILED: 11/17/2009				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 544 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 544 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/578,241	SERIZAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DWIN M. CRAIG	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to September 30<sup>th</sup> 2009.
2.  The allowed claim(s) is/are 1 and 5-7.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 6/26/2006
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

Your indication to enter the sub spec is not on the first page of the new specification, you put the OK to enter on the 2<sup>nd</sup> page of the amendment.

Does the Abstract comply with PTO standards? Currently exceeds 170 words and has the legal phrase “means” in it.

If you have now considered the two foreign references because applicant submitted English abstracts, you need to provide an updated 1449 for that IDS, showing that the references are now considered.

Your reasons for allowance should only address the reasons for allowance and not specific arguments made by the attorney. If you want to add a response to arguments section, then you should include it. The reasons for allowance should simply address what makes the claims allowable and a response to arguments should be on it's own.

**EXAMINER'S AMENDMENT**

**And**

**EXAMINER'S REASONS FOR ALLOWANCE**

1. Claims 1 and 5-7 are allowed.

***Information Disclosure Statement***

2. The Examiner thanks the Applicants' for submitting English Abstracts of the two foreign references JPA 4-64164 and JPA 10-335193 and hereby acknowledges that these references have been considered as to the merits in the pending case.

***Specification***

3. The Examiner thanks the Applicants' for submitting a substitute specification and hereby withdraws the previously applied requirement for a substitute specification.

***Claim Rejections - 35 USC § 101***

4. The Examiner has found Applicants' arguments *in combination with the amendments to the instant claims*, presented in the September 30th 2009 responses to be persuasive and hereby withdraws the previously applied 35 U.S.C. 101 rejections of the same, more specifically the claimed system now contains both a processor and a memory from which the claimed process is executed, therefore the system contains physical elements and the system claim is now directed towards patent eligible subject matter.

***Claim Rejections - 35 USC § 112***

5. As regards the previously applied 112 2<sup>nd</sup> paragraph rejections of the claims, these rejections are now moot in view of Applicants' amendments to the instant claims, more specifically the *means for* language has been deleted and the amendments to the instant claims

provide clear structure as to the *metes and bounds* of the elements in the system. The claim language now possesses clarity and precision and therefore the previously applied 35 U.S.C. 112 2nd paragraph rejections of the claims has been withdrawn.

***Examiner's Amendment***

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Raymond A. DiPerna Reg. No. 44063 on 11/5/2009.

The application has been amended as follows:

The Abstract has been changed to:

--A tabular form element arrangement data describing the arrangement of various component elements constituting a production system along the work flow in a combination of process identification names with component element names, is prepared. Element definition files describing programs for simulating the operations of various component elements are prepared. A program preparation unit sequentially reads component element names combined with process identification names from the element arrangement data and sequentially reads the element definition files corresponding to the read component element names. A variable array containing variables described in respective element definition files is prepared simultaneously along with an initial process program array containing programs described in respective definition files and a simulation program array. The initial process programs contained in the initial process program

array are executed to correspond variables referring to each other and the operations of various component elements constituting a production system are simulated.--

***Examiner's Reasons for Allowance***

7. The following is an examiner's statement of reasons for allowance: While *Meada et al.* teaches a process simulation system and *Bryan et al.* teaches a element definition file reading means, **none of these references taken either alone or in combination with the prior art of record disclose** definition files containing program descriptions and element definition files and further a variable name replacing data for replacing a variable name described in the variable description of each of the element definition files to a different variable name is described in the element arrangement data, specifically including;

(claim 1) "wherein each of the element definition files contains a program description describing an own simulation program and a variable description describing a variable used in the own simulation program, in the variable description, an external reference variable to designate a referring variable being defined in a case of an element definition file to refer to a variable in an other element definition file, and a take-out variable referred to by an external reference variable being defined in a case of an element definition file to make an other element definition file refer to a variable, the process simulation system further comprising: a variable array preparation means for preparing a variable array including all variables described in the variable description of each of the element definition files which had been read by the element definition file reading means; and a variable corresponding means for making the external reference variable contained in the variable array prepared by the variable array preparation

means correspond to the take-out variable and a variable name replacing data for replacing a variable name described in the variable description of each of the element definition files to a different variable name is described in the element arrangement data.” **in combination with the remaining elements and features of the claimed invention.** It is for these reasons, that the Applicants' invention defines over the prior art of record.

**7.1** As regards dependent claims 5-7, they are allowable for at least the reason that they depend upon an allowed base claim.

**7.2** Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

***Response to Arguments***

**8.** The Examiner has found Applicants' arguments to be persuasive; more specifically, Applicants' argued on page(s) 11-12 of the September 30<sup>th</sup> 2009 responses; “Maeda, as understood by Applicants, relates to a simulation method for a modifiable simulation model. The simulation method includes a step of modifying a model in a simulation process, a step of detecting elements influenced by the model modification, and a step of performing a resimulation process while returning to the earliest one of the influenced elements. Bryan, as understood by Applicants, relates to a method and system for efficiently generating parameterized bus transactions for verification of a design-under-test (DUT). The Examiner, at page 14 of the Office Action, concedes that Maeda does not disclose "a variable name replacing data for replacing a variable name described in the variable description of each of the element

definition files to a different variable name is described in the element arrangement data, and the process simulation system further comprising a variable name replacing unit configured to replace a variable name for which the variable name replacing data is set in the element arrangement data to an other variable name described in the variable name replacing data," as now recited in claim 1." , Further the Examiner agrees that the inclusion of the teachings of *Bryan* fail to address the short comings of the teachings of *Meada* and therefore in view of the amended claim language to the instant claims the claims are now in condition for allowance."

The Examiner has found these arguments, in combination with the amendments to the claims, to be persuasive and hereby withdraws the previously applied prior art rejections of the claims.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWIN M. CRAIG whose telephone number is (571)272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwin M Craig/  
Examiner, Art Unit 2123

/Kidest Bahta/  
Primary Examiner, Art Unit 2123